

saccharides having a degree of glucose polymerization of at least 3;

(2) Molecular weight

About 69,000-79,000 daltons on sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE);

(3) Isoelectric point (pI)

About 5.4-6.4 on isoelectrophoresis;

(4) Thermostability

Substantially not inactivated even when incubated in an aqueous solution (pH 7.0) at 85°C for 60 min.; and

(5) Amino acid sequence

An amino acid sequence which is not identical to SEQ ID NO:1 but which has physicochemical properties of (1) to (4) inherent to a thermostable enzyme of SEQ ID NO:1, said amino acid sequence comprising an amino acid sequence of at least two contiguous amino acid residues in SEQ ID NO:3 and/or SEQ ID NO:4 and being encoded by a chromosomal DNA which hybridizes to a probe having the nucleotide sequence of 5'-AAYYTNTGGTAYTTYA ARGA-3' (SEQ ID NO:7) and a probe having the nucleotide sequence of 5'-GARGARTGGCAYWSNATHAT-3' (SEQ ID NO:8).

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